

The close spiral striation of this species, being crossed by the lines of growth, has a minutely subgranular appearance. It is not apparent to the naked eye, but is distinctly visible under a simple lens.

30\*. *Planorbis lucidus*, Pfeiffer.

*Planorbis lucidus*, Pfeiffer, Wiegmann's Archiv f. Naturgesch. 1839, vol. v. p. 534; Sowerby, Conch. Icon. fig. 53? (enlarged); Clessin, Conch.-Cab. ed. 2, p. 193, pl. xxix. fig. 2.

*Hab.* Cuba, Porto Rico, Guadeloupe, Martinique.

A single half-grown specimen is all that was obtained at Barbados.

31\*. *Paludestrina crystallina*, Pfeiffer.

*Paludina crystallina*, Pfeiffer, Wiegmann's Archiv f. Naturgesch. 1840, p. 253; Philippi, Abbild. vol. i. p. 118, pl. i. fig. 18 (fig. 17, var. *coronata*); Küster, Conch.-Cab. p. 50, pl. x. figs. 7, 8 (figs. 9, 10, 11, 12, var. *coronata*).

*Hab.* Cuba, Jamaica, &c.

Both forms of this species, that with smooth whorls and that with short spines, occur at Barbados. "It was met with in Græme Hall Swamp, and was very difficult to find. They laid an immense number of eggs when captured." (*Feilden.*)

BIBLIOGRAPHICAL NOTICE.

*Handbook of the London Geological Field-Class.* Small 8vo, 215 pages, with 18 woodcuts. George Philip and Son. 1891. London.

THIS interesting little book consists of Lectures on the Geology of the London district, by Professor H. G. Seeley, F.R.S., and Reports by Students of the excursions made, from the year 1886 to 1889, to examine practically the Physical Geology of the rocks discussed in the Lectures. The plan of this Field-class Society and its Director (Chairman) is "to teach the elements of Physical Geography and Geology direct from Nature without preliminary study from books;" and, whilst taking their out-door recreation, the Students are thus training their "powers of observation, imagination, and reasoning." Local scenery and all the features of the surface are by these means not only directly noticed, but their relations to the geological structure of the country are learnt, and the causes and history of that structure are brought under notice.

Thus the variations of colour and of light and shade, the different aspects of hill and dale, the presence of particular plants and animals, with other phenomena of nature, become of especial interest for both observation and philosophical consideration.

The constitution of the Society, its Executive Committee, the plan of summer excursions and of winter lectures are explained. The Field-class includes three graduating divisions—one studying geography in relation to geology, another sections of the strata, and the third especially studies one geological formation, all in the Home Counties. The winter lectures successively treat of the geology of different parts of the South-east of England. The method, apparatus, and appliances of geological research are also indicated.

Reports of the lectures given by Prof. H. G. Seeley are then supplied: thus:—1. Introduction to Field Geography, with illustrative notes on the Chalk Hills of Kent and the Valley of the Darent; the Chalk Hills of Surrey; the Chalk Escarpment; and the Sand Hills of Frant. 2. Introduction to Field Geology. 3. The Thames Valley. 4. The Lower Greensand and Upper Neocomian, with nineteen Reports by Students on local exposures and sections of the several beds. 5. The Gault and Upper Greensand, with six local sections by Students. 6. The Chalk, with eighteen illustrative sections by the Students. 7. The Thanet Sands, with four such sections. 8. The Woolwich-and-Reading Beds, with seven such sections. 9. The London Clay, with three such sections. 10. The Brick-earth and Gravels, with four such sections. Several chemical analyses of Lower Greensand, Gault, and Chalk are included in the Reports. A tabulated Register of the fossils found by the Members during the season of 1890, drawn up by Mr. R. H. Bentley, the Secretary, is appended, with proportional blank paper for future use. The woodcuts of sections have been drawn by Mr. Nicol Brown, F.G.S., Vice-Chairman of the Society, chiefly from his own note-book; he has supplied several of the Reports, and he has edited this useful Handbook, illustrative of the Geology of a considerable portion of South-eastern England.

A striking feature in this geological book is the clearness of many of the detailed sections, as described by individual observers—often the same section noted by two or three—mentioning what is most interesting to themselves; some are Female Students. Therefore, taken as a whole, the interpretation of the sections are fitted to different minds, and are not given in one set form of thought and phrases. The influence of the Director's acute observation and broad philosophy is recognizable throughout the work.

A liberal and very useful Index, by Mr. J. H. Hodd, supplies a ready access to the manifold subjects of this Handbook, which will be welcomed by many who seek for information and find interest among the natural sources of amusement and recreation round about London.